

## Cafe Waste and Upcycling to reconnect people, materials and places

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### Abstract

Current human resource use is unsustainable and there are widespread concerns about the implications of continued economic growth and resource consumption including scarcity of raw materials and energy, environmental degradation, and anthropogenic climate change (Schandl et al., 2018). Current approaches to 'design for the circular economy' are based on disassembly, remanufacture or modular designs with the aim to do less bad and retain monetary value. But we need new ways to engage with materials (Heidrich and Harvey, 2018). We argue that one approach to changing these wasteful trends is for people to nurture new kinds of relationships with their possessions- creative, productive relationships.

We did build a café made entirely from waste, where visitors were offered a drink whilst discussing waste and recycling initiatives. We challenged people's perceptions of objects and discuss the potential benefits of upcycling in the context of affluent Western 'consumer' societies, and the scope for designers to imbue objects with the potential for creative reuse (Bridgens et al., 2018). The research was a close collaboration between Architects, Managers, Anthropologists and Civil Engineers.

Where previously products were designed to be serviced and maintained indefinitely, the concept of an (increasingly short) 'product lifetime' was created. The 'throw away' culture had arrived, and would expand to almost every type of product and spread around the globe for the subsequent half century (Vemury et al., 2018). However, the value of a product to the owner does not necessarily decrease with time (Gregson and Crang, 2010). Some objects are cherished as they form part of a person's identity, and objects trigger memories and nostalgia. The emotional value of objects increases if the object has changed with time, making it unique to the user, potentially recording specific events through "use marks" on the object, and if time has been spent maintaining or personalising the object.

We propose that mobilising citizens will be essential in the search for solutions to global challenges through technical and social innovation that supports frugality. These activities originate from the scale of individuals and can be personally specific and idiosyncratic. Social innovation seeks new ideas that simultaneously meet social needs and create new social relationships or collaborations. Frugal innovation is the search for functional solutions using minimal resources, which rely on mental creativity involving fluency and flexibility from a wide range of disciplines.

In this presentation we examine existing upcycling activities across a range of cultures, scales and functions, to explore people's motivations to upcycle, and the barriers to more widespread adoption of upcycling in particular contexts. We report the experiences of the Waste Café and using a

completely upcycled structure as a platform for engagement with hundreds of visitors across a wide sociodemographic range. The research team found great interest and enthusiasm for the concept of upcycling. The poster describes a number of barriers to widespread creative upcycling including availability of space, equipment, time, skills, materials and ideas. We believe that a combination of designing for creative reuse with provision of community 'resource hubs' can create 'geographies' of making.

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